

## Appendix: G – National Fire Protection Association Performance Standard 1710

Communities across the country routinely adopt standards for building, electrical, and plumbing codes and other safety measures, but few have adopted a response-time standard. It is rare for response times to be measured by communities and reported to the public. Creation of local response performance is fundamental to measuring the level of service provided to the community. While the proposed Fontana Fire Protection District should expect to use and measure service level criteria as outlined in the Joint Powers Agreement, the following discussion on NFPA 1710 provides a valuable point of reference.<sup>38</sup>

The National Fire Protection Association (NFPA) has issued a response performance standard for all or mostly career-staffed fire departments. This standard, among other things, identifies a targeted response time for fire departments and a targeted staffing standard for structure fires. **Although the standard is not a legal mandate, NFPA 1710 does provide a useful benchmark against which to measure a fire department's performance.**

NFPA 1710 contains time performance standards for structure fire response as well as emergency medical response—six minutes overall (dispatch one minute, turnout one minute, emergency response four minutes). Each is discussed individually here.

### Structure Fire

NFPA 1710 recommends that the first engine company arrive at the scene of a structure fire within five minutes of dispatch, 90 percent of the time. NFPA uses the 90<sup>th</sup> percentile rather than average. This allows for an evaluation of a department's performance on the majority of its incidents. The NFPA 1710 response time standard also states that four personnel be on the scene of the emergency within the recommended five minutes, 90 percent of the time.

There is another reason the arrival of four personnel is critical for structure fires. As mentioned earlier, current safety regulations require that before personnel can enter a building to extinguish a fire at least two personnel must be present and assigned to conduct search and rescue in case the fire

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<sup>38</sup> NFPA 1710, National Fire Protection Association, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, 2004 Edition

attack crew becomes trapped. This is referred to as the “two-in, two out” rule. The only exception to this regulation is if information is known that trapped victims are inside the fire building.

Given the minimum staffing of engines, the time it takes for the second unit to arrive becomes very important in the achievement of NFPA Standard 1710. If additional help is a significant time distant, the fire will continue to grow rapidly, thereby contributing to more damage and potential life hazard.

Finally, the NFPA Standard calls for the arrival of the entire initial assignment (sufficient apparatus and personnel to combat a fire based on its level of risk) within nine minutes of dispatch, 90 percent of the time. This is to ensure that enough people and equipment arrive soon enough to be effective in controlling a fire before substantial damage occurs.

NFPA 1710 describes the following performance as meeting the structure fire response criteria of the standard:

- Turnout time within one minute, 90 percent of the time,<sup>39</sup>
- Arrival of the first company within four minutes (dispatch and turnout time excluded), 90 percent of the time, or
- Arrival of the entire initial response assignment (all units assigned to the call) within ten minutes, 90 percent of the time.

### **Emergency Medical Response**

There are three time benchmarks within NFPA Standard 1710 for emergency medical response as follows:

- Turnout time within one minute, 90 percent of the time,
- Arrival of a unit with first responder or higher level of capability (basic life support) within six minutes (one minute dispatch, one minute turnout, four minutes response), 90 percent of the time,<sup>40</sup>
- Arrival of an advanced life support unit, where this service is provided by the fire department, within ten minutes (one minute dispatch, one minute turnout, eight minutes response), 90 percent of the time.

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<sup>39</sup> Turnout time is defined as the time beginning when units acknowledge notification of the emergency to the beginning point of response time. This does not include time to receive a 9-1-1 call nor the time required to dispatch the call.

<sup>40</sup> First responder is the most basic level of EMS. The first responder assesses the situation, the victim's illness or injury, and stabilizes their condition until personnel with more advanced training arrives.

As previously discussed, NFPA 1710 sets the response time for the first arriving fire apparatus at five minutes or less, 90 percent of the time. The 1710 standard does not include call-processing time, which is covered in other related NFPA standards that call for a performance of one minute or less for this activity.

#### **Recorded Response Time Performance and Outcomes**

Of significant importance to the proposed Fontana Fire Protection District is how well the emergency response demand will be serviced. One useful way to determine how well demand-based coverage is achieved is by determining maximum response times to a majority of incidents; in this case, we propose 90 percent. As was indicated earlier, the 90<sup>th</sup> percentile is the level at which the majority of performance standards for emergency services are set.